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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,115	10/19/2001	Ying Luo	A-70229/RMS/DHR	2856
20350	7590	11/15/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			GIBBS, TERRA C	
			ART UNIT	PAPER NUMBER
			1635	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/029,115

Applicant(s)

LUO ET AL.

Examiner

Terra C. Gibbs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,3 and 16-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2, 3, 16, 17, and 21-28 is/are allowed.
- 6) ☒ Claim(s) 18 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Office Action is a response to Applicants Amendment and Remarks filed August 19, 2005.

New claim 28 is acknowledged. Claims 2, 3, and 16-28 are pending in the instant application.

Claims 2, 3, and 16-28 have been examined on the merits.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 102***

In the previous Office Action mailed May 17, 2005, claim 27 was rejected under 35 U.S.C. 102(e) as being anticipated by Plowman et al. [U.S. Patent No. 6,680,170]. This rejection is withdrawn in view of Applicants Amendment to the claims filed August 19, 2005. Specifically, the Examiner is withdrawing this rejection in view of Applicants amendment to claim 27 to recite "the full length".

In the previous Office Action mailed May 17, 2005, claim 27 was rejected under 35 U.S.C. 102(b) as being anticipated by Cowser et al. [U.S. Patent No. 6,110,664]. This rejection is withdrawn in view of Applicants Amendment to the claims filed August 19, 2005. Specifically, the Examiner is withdrawing this rejection in view of Applicants amendment to claim 27 to recite "the full length".

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After careful reconsideration of the claims, a new grounds of rejection is presented below:

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The instant specification at page 27, lines 6 and 7 recites, "Appropriate host cells include yeast, bacteria, archebacteria, fungi, and insect and animal cells, including mammalian cells". Therefore, the term "host cell" as recited in claim 18 encompasses a human being, which is non-statutory subject matter. As such, the recitation of the limitation "non-human" would be remedial. See 1077 O.G. 24, April 21, 1987.

***Conclusion***

Claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Allowable Subject Matter***

Claims 2, 3, 16, 17, and 21-28 are allowable. The closest prior art is that of Ippeita et al. (FEBS Letters, 2000 Vol. 469:19-23). Ippeita et al. disclose the molecular cloning of MINK1 (see GenBank Accession Number AB035698 and Figure 2). MINK1 is 96.8% identical to SEQ ID NO:1 and 97% identical to SEQ ID NO:2 of the instant invention. Ippeita et al. do not disclose a recombinant nucleic acid, comprising a nucleic acid sequence having at least 98% or 99% identity to a nucleic acid sequence selected from the group consisting of SEQ ID NOs: 1, 3, and 5, or having at least 98% or 99% identity to an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, and 6, wherein said recombinant nucleic acid encodes a MINK3 protein, or an expression vector comprising said nucleic acid(s), as instantly claimed. Ippeita et al. also do not disclose a recombinant nucleic acid comprising a nucleotide sequence that is complementary to the full length of a nucleic acid sequence having at least 98% identity to a nucleic acid sequence selected from the group consisting of SEQ ID NOs: 1, 3, and 5, or a recombinant nucleic acid comprising a nucleotide sequence that is complementary to a nucleic acid sequence sharing at least 98% identity to the nucleic acid sequence set forth by nucleotides 2804-3187 of SEQ ID NO:1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terra C. Gibbs whose telephone number is 571-272-0758. The examiner can normally be reached on 9 am - 5 pm M-F.

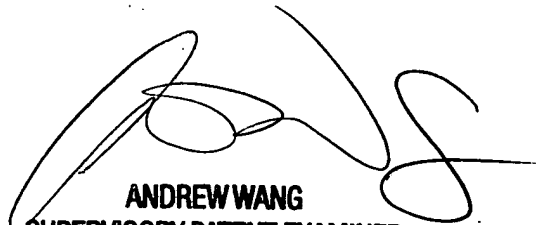
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tcg

November 10, 2005



**ANDREW WANG**  
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